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BEST PRACTICE FOR SUPPORTING STUDENTS IN THE WORKPLACE

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Summary

We investigated the academic performance of distance-taught student Paramedics and the effect of workplace support measures offered by their employers. Using a combination of quantitative, qualitative and open text data, we identified factors important for student success and well-being. Dedicated study time was not a significant predictor of student success, but was related to the quality of achievement as measured by pass grade. More important for success were less tangible factors such as relationship with a mentor, and being part of a supportive peer group. It is important to accord prominence to these features, and to build them into new course design. Care must also be taken that placements elsewhere be well organised, and students proactively supported while undertaking them.

Introduction

Students who are learning in their place of employment have a learning experience that is different from those of their peers learning on campus, or on a distance learning programme (Tynjala, 2008). The Open University (OU) has limited experience of work-based learning (WBL) as it differs considerably from the manner in which the majority of its distance learning curriculum is delivered, which is by tutor-supported blended learning. However, the students on the Foundation Degree in Paramedic Sciences, which was offered from 2009-2016, were work-based students. Responsibility for these WBL students was shared between the OU and the employer: each had specific responsibilities towards the student. Internal survey data showed that the WBL students were generally happy with their OU Tutor support but many claimed that they did not receive adequate support from their employer. Employers confirmed that they did fulfil their obligations towards the students, and indeed there was a high rate of achievement for WBL students; nevertheless there was considerable diversity in the level of support given to students in the workplace and in satisfaction surveys many students reported high levels of anxiety, frustration and unhappiness during their studies.

The aim of this research was to identify factors in the workplace that impact on the student's learning journey. In addition to the normal satisfaction surveys completed by students during their studies, we asked graduates of the Foundation Degree in Paramedic Sciences to reflect on their experiences of WBL by means of a survey questionnaire designed to probe both quantitative (such as facilities and opportunities provided by the employer) and qualitative (such as whether the student felt part of a learning community) factors.

The results from the survey allowed us to identify factors that students feel are important for their success while studying in the work place. They have been used to inform plans for other WBL and Apprenticeship initiatives currently being undertaken within the OU to ensure that the students can be fully supported both by the university and the employer.

Methodology

Ethical approval for this project was obtained from the Open University Human Research Ethics Committee, and the online survey was designed with help from Dr Doug Clow and the Student Research Project Panel, who also administered the survey. Participants were recruited from among students and graduates of the Open University's Foundation degree in Paramedic Sciences. Their responses related to their time studying the capstone WBL module, a 60 credit module studied over 17 months in parallel with other, distance-taught, modules. All student enrolment to the Foundation degree was from pre-existing employees in the Ambulance service (98% in UK National Health Service and 2% in independent organisations), mostly working as Emergency Care Assistants or equivalent roles, and wishing to become registered Paramedics. Students were supported and sponsored by their employers, who undertook to provide them with suitable facilities and learning opportunities, and a workplace mentor. Employers were also responsible for arranging

practice placements for their student Paramedics. Such placements are an essential component of Paramedic training, so hold considerable importance within the Foundation degree. Although employers were advised to give the students protected time to study, not all of them did so, and students frequently had to use their annual leave to complete their studies.

Six cohorts of students were surveyed in this study (n = 339). Anonymised demographic data were obtained from university records, and in the first part of the study responses were collected from the end-of-module survey that was sent to all students upon completion of the module. For the second part of the study, graduates of the programme were invited to participate in a further survey that probed more deeply into their experiences as a student and included categorical, semi-quantitative and open text questions (the survey questions are available on request). There was a low response rate (7.7%) for this part of the study, and only 26 individuals completed the survey. All respondents were from England.

Quantitative analyses were carried out using Microsoft Excel® and GraphPad Prism v5 (GraphPad Software, San Diego, California, USA, www.graphpad.com). Textual analysis was carried out using NVivo (QSR International Pty. Ltd., www.qsrinternational.com).

Results and Discussion

Participant demographics

Participants ranged in age from 28 to 58 (mean = 42) years. All were caucasian. The gender balance was skewed, with 38% respondents being female and 62% male, and this is consistent with the overall gender balance among paramedics in England (40% female; HCPC Statistics). 64% had their studies paid for by their employer and the remaining 36% paid for themselves. Participants had a range of prior educational achievements upon starting the qualification: 27% had no formal secondary school leaving qualifications (UK A Levels), 42% had secondary school leaving qualifications (A Levels or equivalent), and 31% had experience of tertiary education. Overall, 92% of students subsequently applied to become registered Paramedics. This strong result indicates that in spite of set-backs (perceived or real) experienced by students, the Foundation Degree was designed in such a way as to give even low academic achievers a chance to progress in their chosen career. One participant commented:

A very good course and great way of learning to become a Paramedic.

Macro effects of the workplace environment

The first part of this study, involving three student cohorts (n = 169), investigated whether the facilities provided by employers, and particularly the amount of protected study time allowed, affected student performance. Figure 1 shows that only 8% of respondents said that their employers had given them protected study time. This is in contrast to the large number who were provided with a computer (60%) and with skills workshops (77%).

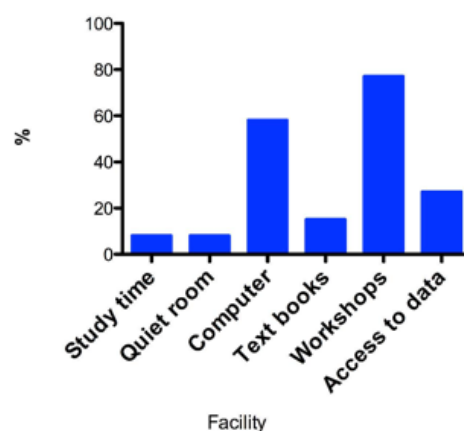


Figure 1 Percentage of respondents able to access study facilities.

Macdonald et al (2010) have emphasised the need for dedicated study time for student success. We compared the pass rates and the quality of the pass (as judged by scores above 70% in the summative assessment) achieved by students in three different NHS Ambulance Trusts and a small group of independent providers. The results are shown in Table 1.

Table 1: Pass rate and pass quality for students from different employers. N.D., not declared.

Employer	Study days per year	Pass rate (%)	Percent of students achieving scores >70%
NHS Trust 1	17.5	94	28
NHS Trust 2	29	85	46
NHS Trust 3	0	89	34
Independents	N.D.	56	10

Surprisingly, among the NHS Trusts there was no effect of study days on pass rate, but there was a significant effect on pass quality ($P = 0.02$, ANOVA). There was also a significant difference in both pass rate and pass quality achieved by students from NHS Trusts compared to those from the independent providers ($P = 0.04$, Fisher's Exact test).

The clear differences between students working in NHS Trusts and those in independent providers suggested that the better infrastructure in NHS organisations, and perhaps consequently a supportive environment, is an important component of student success. However, even successful students complained about the level of support they received in the workplace. For example, only 47.9% felt that the feedback they received on their practice was good, only 43% felt that they were well supported by their placement provider, and only 13% felt that their Mentor understood their needs. These results prompted us to extend our initial analysis to explore workplace support in more detail.

Micro effects of the workplace environment

In the second part of this project we used a targeted survey to gain more insight into students' practical and emotional needs in the workplace. We sought to collect information about real workplace conditions (as opposed to what employers told us) and to identify factors that are important for student success in workplace learning.

A common cause for complaint was the practice placements that student Paramedics are required to undertake. As noted above, the organisation of these was the employers' responsibility, but in fact almost 58% of the placements were organised by students themselves. Many experienced difficulties in doing so, in finding time to undertake them, and in feeling supported while they were there. Sample quotes included:

Employer did not give us time off to attend placements or study leave or workshops. All this had to be in our own time.

Some placements clearly wanted me there and helped me learn, others weren't so keen and made it clear.

Because they were self organised, I had to 'stay under the radar' e.g. I spent a tremendous week on the paediatric ward of a hospital based on friendship with a consultant and had to avoid their hospital placement officer.

The importance of peer support for students has been previously reported (Tout et al, 2014; Borrott et al, 2016), and this factor also emerged in our study. As well as practical problems, students also seemed to lack emotional support in their workplace. Work-based learning students were generally not part of a lively student community. Only 8% had many other students in their workplace, and 12.5% were the only student there. These numbers may have contributed to students' feelings that they were unsupported: only 8% felt well supported, and 46% felt somewhat or completely unsupported. This lack of peer engagement and

support is not conducive to student success. Some proactive students made efforts to establish their own peer support groups:

Very supportive crewmates.

I had limited opportunities to work with my mentor so ended up with a group of colleagues that I'd built 'trust relationships' with and I tended to approach them on issues relating to their strengths and experience

Nevertheless, in contrast to the last comment, 84% of students found their mentor easy to contact, and 77% had a close working relationship with their mentor. The importance of an effective relationship with a workplace mentor has been reported elsewhere by McDonagh et al (2010), Tout et al (2014), and Kramer-Simpson (2018).

We asked respondents to identify other concerns that they had about the workplace learning experience. Analysis of the free text answers provided by the respondents produced the word cloud shown in Figure 2.



Figure 2 Word cloud derived from free text responses

It is clear from this Figure that time management was a major factor for students on this programme. These students, all of whom were in full-time employment, had a working pattern of 12 hour shifts, changing between day and night, and with compulsory overtime during busy periods. In light of this it is not surprising that students felt that they could not easily fit additional study into their normal days, and were compelled to use their annual leave to complete their study tasks (see above). It might be hypothesized that the provision of ring-fenced study time might alleviate this problem, but our quantitative findings (Table 1) showed no significant effect of allocated study hours on pass rate. This does not, of course, provide a measure of student contentment, and this is perhaps better correlated with the effect on pass quality that we report here.

When asked what advice they would give to other students undertaking a WBL programme, participants clearly articulated the negative effect of their perceived time pressure:

Good time management. Great experience to work and practise what you are learning.

Talk to your [...] mentor if you are struggling. They've seen it all before and know how to help.

Fully engage with it throughout because something that doesn't seem relevant at the beginning certainly proves useful later.

Keep at it, don't give up.

The end-of-module surveys used in this project are given to students when they are still immersed in their studies. This means that the responses are not necessarily very objective, being coloured by the students' most recent experiences. By inviting graduates of the Foundation degree to offer their views, we hoped to capture the benefits of their more measured hindsight and perspectives. We received many more positive comments:

At beginning seemed quite daunting however once completed very glad to have had this opportunity and to become a paramedic at the age of 52. Proved to myself that I could do it and now enjoying a challenging job.

I enjoyed it and admit to working diligently throughout completing all the tasks/activities.

A very good course and great way of learning to become a Paramedic.

Conclusions

By eliciting the views of successful graduates from the Paramedic Sciences Foundation degree, and combining them with the views expressed in within-course satisfaction surveys, we have been able to explore more deeply the factors that are important for the success of predominantly distance taught students learning in the workplace. Distance learning is an established and respected method for teaching health care (and other) students (Dodds, 2011), but it seems clear that such students have particular requirements that are important for their success and well-being. Although there was no statistically significant relationship between protected study time and student success, there was an effect on the level of achievement (Table 1). Moreover, since almost all students commented on the time pressures of their study (Figure 2) it is likely that a perception of time pressure contributed to raising stress levels and negative feelings. We would recommend that this be borne in mind when designing WBL curriculum.

Where placements are a component of the WBL, it is important to ensure that they are properly organised and that students are supported in their placements both by their employer and by the placement providers. It is not conducive to a successful placement if students are made to feel unwelcome and an encumbrance (Dorman et al, 2009).

Finally an important factor for student well-being is the amount of day to day support they receive from both their peers and their workplace mentors. Where students are not part of a large student community in the workplace, the suggestion of 'student rovers' (Tout et al, 2014) could be considered. Furthermore, training and development of mentors, such as that suggested by NHS Education for Scotland (2008), should certainly be factored in to course planning.

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